CTET- 2018

EVS- NOTES FOR C-TET PAPER-01

NCF INCLUDED!(By Let's LEARN)

Let's LEARN

Himanshi Singh
LET'S LEARN- YOUTUBE CHANNEL

Going to school:

- The bamboo and rope bridge is being used in – ASSAM
- The trolly – LADAKH
- Cement bridge – Normal Areas or Over Water
- Vallam (small wooden boat) – KERALA
- Camel cart – RAJASTHAN
- Bullock carts – Villages in Plains
- The paths are rocky and uneven- In mountains – UTTARAKHAND
- A bird has its eyes on its head and the holes are covered with feathers-they help them to hear.
- Lizard has the same kind of ears!
- Crocodile too has its eyes like this but we can't see them.
- **DIFFERENT PATTERNS ON THE ANIMALS ARE DUE TO THE HAIR ON THEIR SKIN**

- ***Without hair on an animal's body there would be no pattern!*** [CTET-Sept2016]

- Animals with ears, hair on the body – GIVES BIRTH
- Animals with no ears outside the body – LAYS EGGS
- The oldest female elephant becomes the head of the herd.
- There's no male elephant in the herd- they left as they turn 14 or 15!
- An adult elephant can eat up to 100kgs of leaves and twigs in one day.
- Elephants sleep for only two to four hours a day.

Let's LEARN

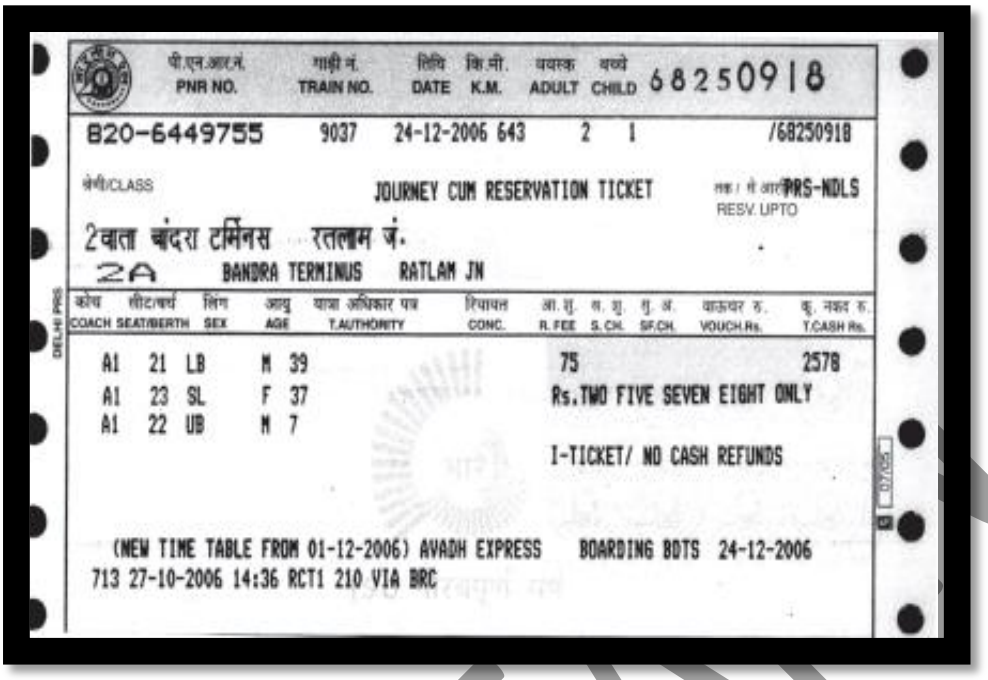
- The mud keeps their skin cool.
- Their big ears also work like fans- ***they flap these to keep themselves cool.***
- There are 10 to 12 female elephants and young ones in a herd.
- **Khejadi** village is near JODHPUR in Rajasthan.
- Places were built by woods at that time- about 300 years ago!
- The people of this village were called **BISHNOIS** .
- The **KHEJADI** tree can grow up without much water.
- It gives beans and Don't get affected by insects.
- Story from **BOCHACHA** village in MUZZAFARPUR district in BIHAR.
- **Honeybees lay their eggs from October to December.**
- Every beehive has one Queen Bee that lays eggs.
- There are only few males in the hive.
- Most of the bees in the hive are worker bees.
- The male bees have no special role as workers.
- Train is started from **GANDHIDHAM in KUTCH** – GUJRAT
- **Food of GUJRAT**- dhokla with chutney, lemon rice, mithai.
- AHMEDABAD and Valsad are in GUJRAT.
- **Kozhikode** is in KERALA.
- **Madgaon** is in GOA.
- **There are total 2000 bridges and 92 tunnels in the route from Goa to Kerala.**

Let's LEARN

- Kozhikode is a city in the state of Kerala in southern India on the Malabar Coast- it is also known as **CALICUT.**
- On the way to Gujrat to Kerala, the train crosses – MAHARASHTRA, GOA, KARNATAKA.
- Kottayam is the town in the Indian state of KERALA.

Language	**where it is spoken (state)**
1. Malayalam	Kerala
2. Konkani	Karnataka, Maharashtra, Goa and in some part of Kerala.
3. Marathi	Maharashtra, Goa, Daman & Diu, Dadra & Nagar haveli
4. Gujarati	Gujrat
5. Kannada	Karnataka, Andhra Pradesh, Tamil Nadu, MH

Let's LEARN



पी.एन.आर.नं. PNR NO. | गाड़ी नं. TRAIN NO. | तिथि DATE | कि.मी. K.M. | वयस्क ADULT | बच्चे CHILD | 68250918

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क्लास/CLASS | JOURNEY CUM RESERVATION TICKET | तक/से आरक्षण RESV. UPTO PRS-NDLS

2चाता चांदरा टर्मिनस रतलाम जं.

2A BANDRA TERMINUS RATLAM JN

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A1	21 LB	M	39			75				2578
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A1	22 UB	M	7							

I-TICKET/ NO CASH REFUNDS

(NEW TIME TABLE FROM 01-12-2006) AVADH EXPRESS BOARDING BDTS 24-12-2006

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DELHI PRS

6. Ferry is a kind of boat used in Kerala.

7. *The details you can find on a train ticket -*

- The train number.
- The date of start of the journey.
- The berth and coach numbers.
- The fare (the cost of the ticket).
- The distance (in kms).

Let's LEA

Karnam Malleshwari

Have you seen or read about her in the newspapers? Karnam Malleshwari is a weight lifter. She lives in Andhra Pradesh. Her father is a police constable. Malleshwari started lifting weights when she was 12 years old. Now she can lift a weight of 130 kilograms.

Karnam has won 29 medals in international events. Her four sisters also practise weight lifting.

Let's LEAR

- The flower valley can be found in the hills of Uttarakhand.
- Flowers Like marigolds, zenia are used to dye clothes.
- The KANNAUJ district in Uttar Pradesh is famous for itr making.
- State on map KERALA & MAHARASHTRA ____

MADHUBANI PAINTING:

- The design in the picture is called ‘Madhubani’.
- It is a very old form of folk art.
- *Do you know why it is called Madhubani?*
- There is a district in Bihar called Madhubani.
- These paintings are made out of paste of powdered rice in which color has been mixed.
- To make these, indigo (Neel), turmeric (Haldi), colors from flowers and trees, etc., are used.
- The paintings show human beings, animals, trees, flowers, birds, fish and many other animals.

- Belvanika village is in Karnataka.
- Gijubhai Badheka lived in Gujarat. He wrote many stories for children.
- An Indian robin lays its eggs in between of stones along road side.
- Koel lays its egg in crow’s nest.
- Birds use the nest only to lay their eggs.
- After the eggs have hatched and the chicks have grown, they leave the nest.
- Nallamada is in Andhra Pradesh.
- Holgundi is in Karnataka.
- The children’s panchayat was called Bhima Sangh in Hilgundi.
- **ABOUT BANYAN TREE**- What looks like the hanging branches are actually the roots of the tree.
- Desert Oak is a tree that is found in Australia.
- Oak tree’s roots go deep into the ground till they reach water. This water is stored in the tree trunk.
- Bihu festival is celebrated in Assam on the occasion of new rice crop.

Let's LEARN

- **Magh Bihu** is celebrated on 14th and 15th of January or in the 1st & 2nd Magh, the tenth month of Assamese calender.
- They make **bhela ghar** from bamboo.
- **Mukhtapur** village is in the **Pochampalli** district of **Andhra Pradesh**.
- Traditional occupations are carpet weaving, toy making, Itr(perfume) production, etc.
- These things have become famous by the name of the place where they are made like– **Kullu shawls, Madhubani paintings, Assam silk, Kashmiri embroidery,** etc.
- Abu Dhabi is in UAE (UNITED ARAB EMIRATES).
- Currency of Abu Dhabi is **Dirham**.
- **Chittappan –** Father's younger brother in Malayalam.
- **Kunjamma –** Father's younger brother's wife in Malayalam.
- In Kerala you can see many fruit trees like – Coconuts, Bananas, Jackfruit, Papaya, Betelnut etc.
- The only tree which grows in desert is Date Palms.
- You can find various spices in Kerala like- Tejpatta, Cardamoms and Black pepper.
- **Garam masala** is made of small and big cardamom, clove, cumin seeds (zeera), cinnamon, black pepper, dry ginger etc.
- This is the story of **lieutenant commander Wahida Prism** who is a doctor in the Indian navy.
- She is the **first woman** to lead a parade.
- Wahida Prism is from Thannamandi which is in Rajouri district of Jammu and Kashmir.

Let's LEARN

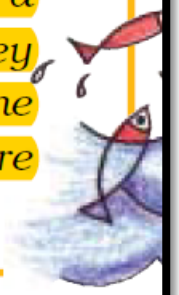
- Total number of commands in a parade is **36**.
- Tibetan also called Bhoti is the language spoken in ladakh.
- Mother in bhoti language- aama-le.
- Father in bhoti language- aaba-le.
- As the ants move, they leave a smell on the ground. The other ants follow the smell to find the way.
- A silk worm can find its female worm from many kilometers away by her smell.
- Mosquitoes can find people by the smell of their body.
- They also find them by the smell of the sole of their feet and the heat of their body.
- Dogs mark out their own area on the road.
- They can make out if another dog has come into their area by the smell of its urine or potty.
- Most of the birds have their eyes on either side of the head and their eyes can focus on two different things at a time.
- When they look straight ahead, both their eyes focus on the same object.
- In most of the birds, eyes are fixed and cannot move that's why birds have to turn their heads to see around.
- Some birds like Kites, Eagles, Vultures can see four times as far as we can.
- These birds can see things from a distance of eight meters what we can see from a distance of two meters.
- Animals cannot see as many colors as we can- It is believed that animals that are awake in the daytime can see some colors.

Let's LEARN

- Those animals that are awake at night can see things only in black and white colors.
- Birds ears are small holes covered with feathers.
- Snakes are deaf and they only feel vibrations on the ground.
- Some birds and animals have different sounds for different situations such as for danger or happiness- e.g Langur, Tiger or leopard.
- Some animals start behaving in a different way when an earthquake or storm is about to come.
- People who live in forests and can observe such behavior of animals come to know danger.

Let's LEARN

In December 2004, few tribes that live in the forests of the Andaman Islands noticed the animals behaving in a different manner. They guessed some danger. So they moved away to a safer part of the island. Soon after, the islands were hit by the tsunami but these people were saved.



Teacher's Note : When a bird focuses both eyes on an object, it can estimate the distance. When its eyes focus on two different things, it increases its range of vision. Children will understand this better, once they start observing the location of eyes of different birds. While seeing with one eye and then with two eyes, children will understand how with two eyes, the span of vision increases.

Sloth

It looks like a bear but is not. It is a sloth. It spends almost 17 hours a day sleeping while hanging upside down on a tree branch. The sloth eats the leaves of the same tree on which it lives. It hardly needs anything else. When it has eaten enough leaves from that tree, it moves to the nearby tree.

Sloths live for about 40 years and in that time they move around only eight trees. Once a week it comes down from the tree to relieve itself.

ABOUT SLEEP

- Lizards go into a long, deep sleep for almost a season.
- Cow sleeps around 4 hours.
- Python sleeps around 18 hours.
- Giraffe sleeps around 2 hours.
- Cat sleeps around 12 hours.

- Things you need to know about the TIGER!

- A tiger can see six times better at night than most of us.
- The tiger's whiskers are very sensitive and can sense the movements or vibrations in the air.
- They help the tiger move in the dark and find its prey.
- A tiger's sense of hearing is so sharp that it can make out the difference between the rustling of leaves and sound of an animal moving on the grass.
- The ears of the tiger can move in different directions and this helps to catch him the sounds from all around.
- Tigers make different sounds for different purposes e.g- when it is angry, when it callout a tigress.
- It can also roar or snarl. its roar can be heard up to 3kms away.

Let's LEARN

• Danger To Animals!

- The tiger is one of the most alert animals. And yet, today tigers are in danger.
- Elephants are killed for their tusks, rhinoceros for its horn, tigers, crocodiles and snakes for their skins.
- Musk deer are killed just to make a little scent from its musk.
- Some forest areas that are protected by our government these are:
- **THE JIM CORBETT NATIONAL PARK** in UTTRAKHAND and **'GHANA'** in BHARATPUR district of RAJASTHAN.
- In these areas nobody can hunt animals or destroy the jungle.

• A Snake Charmer's Story!

- Sapera's are also called KALBELIYAS.
- *NAAG GUMPHAN- Designs of this kind are used in Rangoli, embroidery and as well decoration in Saurashtra, Gujrat and South India.*
- The Snake Charmers recognize a snake bite by its bite marks.
- The snake charmers collect or make many medicines with the help of plants, which they found in forests.
- Snakes are helpful for farmers as they eat rats in the fields, otherwise rats would eat the crops.

Let's LEARN

- ONLY FOUR TYPES OF SNAKES ARE POISONOUS IN INDIA!

- **Cobra,**
- **Common krait,**
- **Russel's viper (Duboiya),**
- **Saw- scaled viper (Afai).**
- A snake has two hollow teeth (fangs). The poison enters the person's body through these fangs.
- The medicine for a snake bite is made from the snake's poison and is available in all govt. hospitals.

- From Tasting to Digesting:

- Our stomach's temperature is about **30°C**.
- The juice in our stomach is **acidic** in nature.
- Most rice grows in Kalahandi district (Odisha).
- Rice is even sent to other states from here.
- Despite of that much production of rice - There are many poor people in Kalahandi.
- Muslin cloth is used to strain something.
- Atreyapuram town is in Andhra Pradesh.

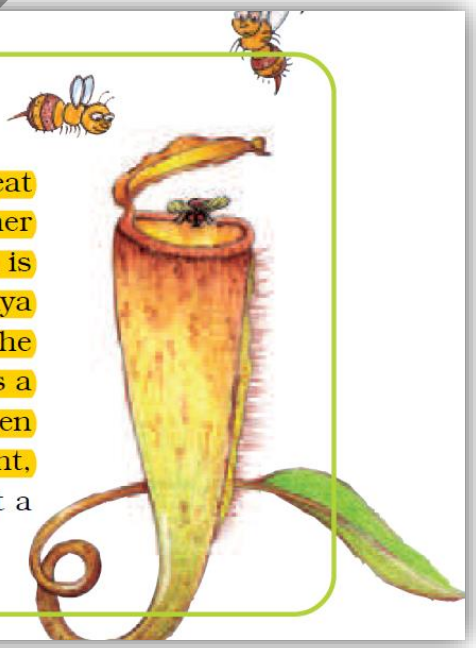
Let's LEARN

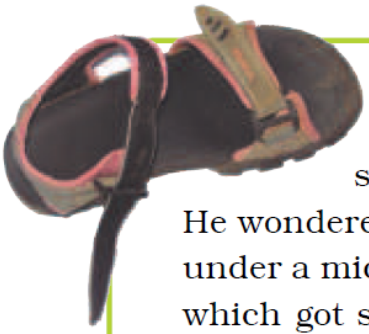
- Glass jars and bottles are dried well in the sun before filling them with pickles so that no moisture is left in them.
- **Given below are some food items and some simple methods by which these could be kept fresh for 1-2 days. Match the correct pairs:**

Food items	Methods
Milk	Put in a bowl and keep the bowl in a container with some water.
Cooked rice	Wrap in a damp cloth.
Green coriander (*Dhania*)	Boil it.
Onion, garlic	Keep it in a dry open place.

Plants which hunt!

There are some plants which trap and eat frogs, insects and even mice. The Pitcher plant (Nepenthese) is one such plant. It is found in Australia, Indonesia and Meghalaya in India. It has a pitcher-like shape and the mouth is covered by a leaf. The plant has a special smell that attracts insects to it. When the insect lands on the mouth of the plant, it gets trapped and cannot get out. What a clever way to hunt!





This happened in 1948. One day George Mestral came back from a walk with his dog. He was amazed to find seeds sticking all over his clothes and on his dog's fur. He wondered what made them stick. So he observed these seeds under a microscope. He saw that the seeds had many tiny hooks which got stuck to clothes or fur. This gave Mestral the idea of making Velcro. He made a material with similar tiny hooks that would stick. Velcro is used to stick together many things – clothes, shoes, bags, belts and many more. What a way to take inspiration from nature!

Wandering seeds!

- The seeds are great travelers! They can reach far and wide.
- The seeds has many tiny hooks which get stuck to clothes or fur. They can also travel through water.
- When the soyabean pods are ripe, they burst and the seeds are thrown out.
- GREEN CHILLIES, TOMATO and POTATO were brought to INDIA by traders coming from South America.
- FROM EUROPE – Cabbage and Pea were brought.
- FROM AFRICA – COFFEE Beans and Green Bhindi.

Let's LEA

• EVERY DROP COUNTS

- This chapter talks about a place named GHADISAR. Sar means a lake.
- There was the school on the Ghat.
- This is the story of JAISALMER.
- There were nine lakes and they can be filled with a single lake.
- Jaisalmer get very little rainfall, once in a year or sometimes not even that.
- At some places people celebrate it whenever lakes get filled up with water e.g in UTTARAKHAND new bride goes to bow to the spring or the pond.
- THE REASONS WHY WELLS HAVE DRIED UP…
- *Water is being pumped up from under the ground, with the help of electric motors.*
- *The lakes in which rain water used to collect are no longer there.*
- *The soil around trees and parks is now covered with cement.*

LET'S LEARN

Think over it!

In 1986, there was no rain in Jodhpur and the surrounding areas. People remembered the old and forgotten stepwell (baoli). They cleaned the stepwell and more than two hundred trucks of garbage was taken out of it. People of the area collected money. The thirsty town got water from the stepwell. After a few years it rained well and again the stepwell was forgotten.

Through the eyes of Al-Biruni

More than a thousand years ago, a traveller came to India. His name was Al-Biruni. The place that he came from is now called Uzbekistan. Al-Biruni carefully observed and noted down the details of all that he saw. He wrote especially about those things that he found very different from his own country. Here is a part of what he wrote about the ponds of that time.

The people here are very skilled at making ponds. My countrymen would be surprised to see them. They pile up huge rocks and join them with iron rods to build *chabutaras* (raised platforms) all around the lake. Between these, there are rows of long staircases, going up and down. The steps for going up and coming down are separate. So there is less crowding.

Today when we study history, we can learn a lot about those days from the writings of Al-Biruni. (This stamp came out in 1973, one thousand years after his birth.)

Let's LE

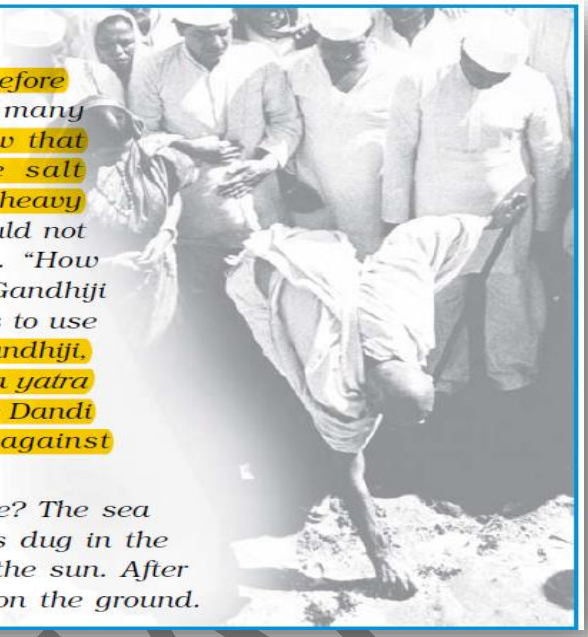
EXPERIMENTS WITH WATER

- All oceans and seas have salty water.
- The saltiest water can be found in the dead sea.
- Around 300gms of salt in one litre of water.
- No one can be drawn in the dead sea because of that much salt.(density)
- The person will float on the surface of water.

Dandi March

This incident took place in 1930, before India became independent. For many years the British had made a law that did not allow people to make salt themselves. They had also put a heavy tax on salt. By this law people could not make salt even for use at home. "How can anybody live without salt?" Gandhiji said, "How can a law not allow us to use freely what nature has given!" Gandhiji, with several other people, went on a yatra (long walk) from Ahmedabad to the Dandi seashore in Gujarat, to protest against this law.

Do you know how salt is made? The sea water is collected in shallow beds dug in the sand. Water is allowed to dry in the sun. After the water dries the salt remains on the ground.



A TREAT FOR MOSQUITOES

- In malaria Fever comes with Chills and Rigors.
- Medicine for malaria- bark of the cinchona tree.
- Iron can be found in – Jaggery, Amla and more green leafy vegetables.
- Flies spread diseases like stomach problems.
- Algae is a kind of plant which spreads in the rainy season (mostly).
- The scientist who peeped into a mosquito's stomach- **RONAL ROSS**.
- He found out about malaria before this people believe that it's a disease of bad air.
- Malaria is caused by a one-celled parasite called a Plasmodium.
- Female Anopheles mosquitoes- looks brownish with spotted wings.

Let's LEA

Anaemia common in Delhi school

17 November, 2007 - Thousands of children studying in the Municipal Corporation schools in Delhi suffer from anaemia. This is affecting both their physical as well as mental health. Due to anaemia, children do not grow well, and their energy levels are low. This also affects their ability to study properly. Now health check ups are being done in the schools and health cards are being made for all the children. Anaemic children are also being given iron tablets.

Medicine for Malaria

From early times, the dried and powdered bark of the Cinchona tree was used to make a medicine for malaria. Earlier people used to boil the bark powder and strain the water which was given to patients. Now tablets are made from this.

• UP YOU GO!

- *Qualities of a Leader:*

  – Help others in carrying their bags.

  – Let the group go ahead and keep to the last.

  – Help those who cannot climb properly.

  – Find a good place to stop and rest.

  – Look after those who are not well.

  – Arrange for food for the group.

- The most important thing is to be ready to be punished even when someone else may have made a mistake.

- Vitamins and iron give strength and keep us warm in the cold.
- Tekla village is at the height of 1600 mts in Jhalrapatan (Jhalwar) RAJASTHAN.
- The angle of our body should be 90 degree while climbing and the back should be straight.
- **Bachhendri Pal** is the first Indian woman and the fifth woman in the world to reach the peak of Mount Everest.

Let's LEARN

Alone on the mountain top

A twelve-year old girl living in the mountains was out on a school picnic. She climbed a mountain peak of 4000 metres with her friends. The girls had done this for fun and adventure. Soon it was dark and they could not come down. It was also cold and scary. They were alone without any food and it was a long night. This happened to Bachhendri Pal, played when she was a young girl.

Bachhendri grew up in Nakuri village in the Garhwal area of Uttarakhand. When she grew older, she joined Nehru Institute of Mountaineering, Uttarkashi. Her guide was Brigadier Gyan Singh. Bachhendri did very well in her training. She started to train women in mountaineering courses. In 1984, Bachhendri was selected as a team member to climb the Mount Everest.

Snow storm

climbing slowly but steadily towards the peak. It was seven minutes past one o'clock in the afternoon of 23th May when Bachhendri Pal stepped onto the peak of 8900 metre high Mount Everest also called Sagarmatha in Nepal.

There was another team member with her. There was no space for two people to stand on the top at the same time. One slip and they would fall straight down-thousands of feet below! Bachhendri and her team-mate dug into the snow and pitched their axe firmly in the ice. Using this as a hook, they tied themselves to it with a rope. Only then two of them could stand there. She was shivering with cold but filled with the warmth of achievement. She bowed her head, pitched the national flag and took photographs. She spent 43 minutes on the highest peak in the world.

Bachhendri Pal became the first Indian woman and the fifth woman in the world to reach the peak of Mount Everest.

Teacher's Note : *Teachers can either make available the photographs or if possible the actual mountaineering equipment like sling, pitons, hunter shoes, sleeping bag etc. This will help discussion with children.*

Teacher's Note : *These pages of a diary are based on the real experiences of Sangeeta Arora. She teaches in Kendriya Vidyalaya, Shalimar Bagh, Delhi and is also a member of this EVS textbook writing team.*

A Shelter so High!

- Mumbai is the most crowded city of India.
- To reach Delhi from Mumbai one has to cross many states like Maharashtra, Gujrat, Rajasthan.
- The distance from Mumbai to Delhi is 1400kms.
- The roads of Jammu and Kashmir are difficult due to mountains.
- One has to cross Jammu and Kashmir in order to reach Leh Ladakh.
- People use **Nylon** tents on hilly areas.
- Ladakh is called cold desert.
- In Ladakh you'll see wooden houses, houses with sloping roofs and covered in snow.
- Manali is in Himachal Pradesh.
- Ladakh is high, dry and flat called a cold desert.
- Ladakh gets very little rainfall.
- There are high snowcapped mountains and a cold, flat ground because of the dryness no plants and trees grow in Ladakh.
- In Ladakh **'Jule Jule'** means welcome, welcome.
- It was a building with two floors.
- The house was made of stones which were kept one over the other.
- The walls were coated with a thick layer of mud and lime.
- The house looked like a shed from inside with a lot of hay stored there.
- We took the wooden steps and reached the first floor.

Let's LEARN

- The ground floor is for animals and for storing necessary things.
- Sometimes when it gets too cold, people also move downstairs.
- Here ground floors have no windows.
- The thick tree trunks are used to make roofs strong.
- Red chilly, orange pumpkins and golden yellow corns are found in Ladakh.
- During summer season we dry many fruits and vegetables, We store them for winters when we do not get fresh fruits and vegetables.
- **The thick walls, a wooden floor and a wooden ceiling protects the people of Ladakh from the cold.**
- In Ladakh there are narrow, rocky mountain roads. At many places there are no roads at all.
- **Changthang** is at a height of almost 5000 metres. It has rocky plains there.
- At a very high place people feel difficult to breath, headache and feel weak.
- There are no petrol pumps and no mechanics there.
- **Changpa** – a tribe living on the mountains.The Changpa tribe has only about 5000 people.
- The Changpa's are always on the move with their goats and sheep.
- They get all that they need – milk, meat, skin for tents and wool for coats and sweaters.
- If a family has more animals it is considered rich and important.
- *From these special goats they get wool for making the famous pashmina wool.*
- The Changpa graze their goats at higher and colder places so that the goats have more and softer hair (fur).

Let's LEARN

- They stay high up on these mountains in very difficult conditions because that is where these goats can live.
- This is their life and their livelihood.
- the Changpas carry everything that they own on their horses and yaks. It takes them only two and a half hours to pack everything and move ahead.
- The Changpas call their tents Rebo.
- Yak hair is woven to make strips which are stitched together.
- These are strong and warm and protect them from the icy strong winds.
- In winters the temperature drops many degrees below zero! The wind blows at 70 Kms per hour.
- In changpa language *Changthang* means a place where very few people live.
- In Shrinagar you will see some houses on the mountains, while some on water.
- In Kashmir every lane has a bakery. Kashmiri people don't cook roties in their homes, they buy it from such bakeries.
- ***Different kinds of shelters in Jammu and Kashmir – some on high mountains, some on water, some with beautiful designs in wood and stone, and some mobile shelters that can even be packed and carried to another place.***
- Near the Rebo there was a place to keep sheep and goats. Changpas call it Lekha. The walls of a Lekha are made with stones.
- Each family puts a special mark on their own animals.
- The women and young girls count and take the animals out of the lekha.
- Kargil comes in the way to Shrinagar from Ladakh.

Let's LEARN

Teacher's Note : *In the language of the Changpa 'changthang' means a place where very few people live. Are there words like this in different languages spoken by children? As you go up the mountain, the level of oxygen in air becomes less and at times people have to carry oxygen cylinders. It is not expected that children understand the concept of 'oxygen'. But children may have some idea that it is difficult to breathe on high altitudes. This will make them sensitive towards people living in such conditions. Through this they will also understand all kinds of difficulties people have to face for a living.*

The world famous pashmina

It is believed that a pashmina shawl is as warm as six sweaters! It is very thin yet very warm. The goats from which the soft pashmina wool is collected, are found on very high altitudes of 5000 metres. In winter, the temperature here drops below 0°C (–40°C). A coat of warm hair grows on the goat's body which protects it from extreme cold. The goats shed some of their hair (fur) in summer. This hair is so fine that six of these would be as thick as one hair of yours!

The fine hair cannot be woven on machines and so weavers of Kashmir make these shawls by hand. This is a long and difficult process. After almost 250 hours of weaving, one plain pashmina shawl is made. Imagine how long it would take to make a shawl with embroidery.

Houses of Srinagar!

- Houseboats- *Houseboats can be as long as 80 feet and around 8 to 9 feet wide.*
- *Donga- These boats can be seen in Dal Lake and Jhelum river. From inside the 'donga' is just like a house with different rooms.*
- *Beautiful carving on wood can be seen on the ceiling of houseboats and some big houses. This design is called 'khatamband', which has a pattern that look like a jigsaw puzzle.*

- *In villages of Kashmir, houses are made from stones cut and kept one on top of the other and coated with mud. Wood is also used. The houses have sloping roofs.*
- *Some old houses have a special type of window which comes out of the wall. This is called 'dab'. It has beautiful wood pattern.*
- *The old houses here are made of stone, bricks and wood. The doors and windows have beautiful arches (mehraab).*

Houses of Srinagar – My photo album

Tourists who come to Srinagar love to stay in houseboats. Houseboats can be as long as 80 feet and around 8 to 9 feet wide.

Many families in Srinagar live in a 'donga'. These boats can be seen in Dal Lake and Jhelum river. From inside the 'donga' is just like a house with different rooms.

When the Earth Shook!

- On 26th January 2001, earthquake hit the Kutch area in Gujrat.
- We shold do these things when an earthquake comes…

- If possible leave the house and go to an open ground.

- If you cannot go out of the house, lie down under a strong thing like a table and hold on tightly, so that it does not slip away. Wait until the shaking stops.

Sunil Jacob

Ahmedabad, January 26, 2001

At least a thousand people are feared dead in the earthquake that struck Gujarat this morning. Many thousands have been injured. Army jawans have been called in to help.

At least a hundred and fifty buildings have fallen in the city of Ahmedabad. In these, there are a dozen multi-storeyed buildings. By this evening, around 250 bodies have been removed from these buildings. It is feared that several thousand people may still be trapped. Rescue efforts are on. There is perhaps no building in the city which has not developed cracks.

The situation in Bhuj is even worse. People are running around in shock and panic. Within an hour of the earthquake the fire engines had reached and started work along with the local people. Offers to help are coming from all corners of the country and abroad.

Blow Hot, Blow Cold

- This story has been written by Dr. Zakir Hussain, former President of India.
- The air coming out of our mouth can be cold or hot as compared to the temperature outside.
- Stethoscope is used to listen our heartbeats.
- The cold air comes down as it is heavier.
- The breath can be cold or hot according to the outside temperature.

Teacher's Note : Air blown out from our mouth is hot and the mirror cold. The hot air that we breathe out contains water vapour which turn into tiny droplets of water when it comes in contact with the colder mirror. This makes the glass moist and hazy.

Who will do this Work?

- **To sensitise children to be respectful** during their interactions with cleaning department of the school.
- So that children can think of some ways (machines, or other things) so that people would not have to do the work they don't like to do.
- Gandhiji's friend Mahadevbhai's son Narayan stayed with Gandhiji when he was young.
- Teacher can use news items on issues related to 'untouchability' in the class to develop sensitivity.
- Bhimrao Ambedkar was from Goregaon in Maharashtra.
- The Indian Constitution was prepared under the leadership of Baba saheb Ambedkar.
- **Interview (adapted) from the documentary film 'India Untouched' by Stalin. K.**

Let's LEARN

Remembering those days

When Narayan (Babla) was about 11 years old, he was staying in Gandhiji's Sabarmati Ashram. Like everyone else in the Ashram, he had to do various kinds of work. One of his jobs was to teach the guests how to clean the toilets. In those days, the toilets were not what we know today. There used to be holes under which baskets were kept. People sat on the holes. Later the baskets had to be lifted by hand, to be emptied.

It was the usual practice that people from a particular community would do this work. But in Gandhiji's Ashram, every person had to carry the basket to the compost pit and empty it there. No one was excused from this task - not even the guests. Narayanbhai remembers how some people used to try and avoid this work. Some even left the Ashram because of this.

Some years later Gandhiji went to stay at a village, near Wardha in Maharashtra. Gandhiji, Mahadevbhai and others started to clean the toilets in the village. They did this for some months. One morning a man coming from the toilet, saw Mahadevbhai. He pointed to him and said "There is a lot of dirt over there. Go and clean that!" When Babla saw this, he was very angry. He thought, the villagers felt that this was not their work. This was for Gandhiji and his team to do. He asked Gandhiji why this was so. Gandhiji replied, "Untouchability is a serious matter. Lot of hardwork will be required to change this."

Narayan knew that the people who usually did this work were thought to be untouchable. He asked "What is the use if the village people do not change their thinking? They have become used to someone else doing this work for them."

Gandhiji replied, "Why"? Don't you think the people who clean also benefit from it. They also learn a lesson. To learn something is like learning a new skill. Even if it is a cleaning job."

Little Narayan was not convinced. He again argued, "Those who make a place dirty but do not clean it should also learn lessons." Gandhiji and Narayan continued to argue about this. But when he grew up Narayan always followed the path shown by Gandhiji.

From the book in Gujarati by Narayanbhai Desai – Sant-Charan-Raj, Sevita, Sahaj

Across the Wall

- The Nagpanda and Afsana Mansuri Basketball teams are in Mumbai.
- Victoria Terminus Station (railway station) is in Mumbai.
- Discuss these to build children's understanding on issues, such as, similar games for boys and girls, equal opportunities for all while playing etc.
- Sholapur is in Mumbai.
- Try to develop an understanding in children that players are recognized by their ability to play rather than by their caste or economic status.
- Bacchu khan playground is in Mumbai named after a coach Mustafa Khan.
- **This chapter is about climbing the gender wall made by society.**

A Seed tells a farmer's story

- Vangaam is in Gujrat.
- In old times good seeds were stored in dried gourd(lauki) coated with mud.
- Neem leaves protect seeds from insects.
- Undhiya is a kind of dish(sabji) prepared by keeping the pot upside down between hot coals. (undhiya means upside down in Gujrati).
- Undhiya is being eaten with bajra rotis and home-made butter, curd and buttermilk.
- By growing the same crop over and over and using so many chemicals the land becomes unfertile.
- Crotons plants give signal when the soil becomes dry.

Let's LEARN

- The roots of the crotons do not go deep in the ground. So when the top layer of the soil becomes dry, the croton leaves bend and become limp.
- The earthworms soften the soil by digging underneath to make tunnels.

• WHOSE FORESTS?

- Kuduk is a community of Adivasi people in Jharkhand.
- The forests are disappearing – in their place mines are being dug, dams are being built.
- Torang means jungle in the kuduk language.
- Right to forest act was made in 2007.
- The land on which we grow one tin of seeds is called one tin of land.

Right to Forest Act 2007

People who have been living in the forests for at least 25 years, have a right over the forest land and what is grown on it. They should not be removed from the forest. The work of protecting the forest should be done by their Gram Sabha.

Suryamani's story is a true story. Suryamani is a 'Girl Star'. 'Girl Stars' is a project which tells extraordinary tales of ordinary girls, who have changed their lives by going to school.

Teacher's Note : *Encourage children to share their experiences and imagination about forests. Planting thousands of trees does not make a forest. It is important to discuss the web of relationships between plants, trees and animals in a forest, to see how they depend on each other for food, security and habitat.*

- **JHOOM FARMING**

- After cutting one crop, the land is left as it is for some years. Nothing is grown there.
- The bamboo or weeds which grow on that land are not pulled out. They are cut and burnt. The ash makes the land fertile.
- When the land is ready for farming it is lightly dug up, not ploughed.
- Weeds and other unwanted plants are also not pulled out, they are just cut. So that they get mixed with the soil. This also helps in making the soil fertile.
- This is being done in Mizoram.
- The main crop here is rice.
- The people celebrate when the crop is ripened and they do Cheraw dance holding bamboos.
- Like Father,
  Like Daughter
- We acquire certain traits at birth from our parents and certain things or skills we learn from our environment.
- Polio is caused by a virus, it is not inherited.
- A doctor can be invited to spread information about these disease.
- Gregor Mendel was born in a poor farmer's family in Austria in 1822.
- For seven years he did experiments on 28,000 plants in the garden of the monastery.
- Pea plants have some traits which come in pairs- Like the seed is either rough or smooth.

Let's LEARN

Experiments with peas – rough or smooth?

Gregor Mendel was born in a poor farmer's family in Austria in 1822. He was very fond of studies but the very thought of examinations made him nervous (Oh! you too feel the same!). He did not have money to study at the University so he thought of becoming a 'monk' in a monastery. He thought from there he would be sent to study further. Which he was. But to become a science teacher he had to take an exam. Oh no! he got so nervous that he kept running away from the exam, and kept failing!

But he did not stop doing experiments. For seven years he did experiments on 28,000 plants in the garden of the monastery. He worked hard, collected many observations, and made a new discovery! Something which scientists at that time could not even understand! They understood it many years after his death, when other scientists did such experiments and read what Mendel had already written.

What did Mendel find in those plants? He found that the pea plant has some traits which come in pairs. Like the seed is either rough or smooth. It is either yellow or green, and the height of the plant is either tall or short. Nothing in between.

The next generation (the children) of a plant which has either rough or smooth seeds will also have seeds which are rough or smooth. There is no seed which is mixed – a bit smooth and a bit rough.

He found the same with colour. Seeds which are either green or yellow give rise to new seeds which are either green or yellow. The next generation does not have seeds with a mixed new colour made from both green and yellow. Mendel showed that in the next generation of pea plants there will be more plants having yellow seeds. He also showed that the next generation will have more plants with smooth seeds. What a discovery!

On the Move Again

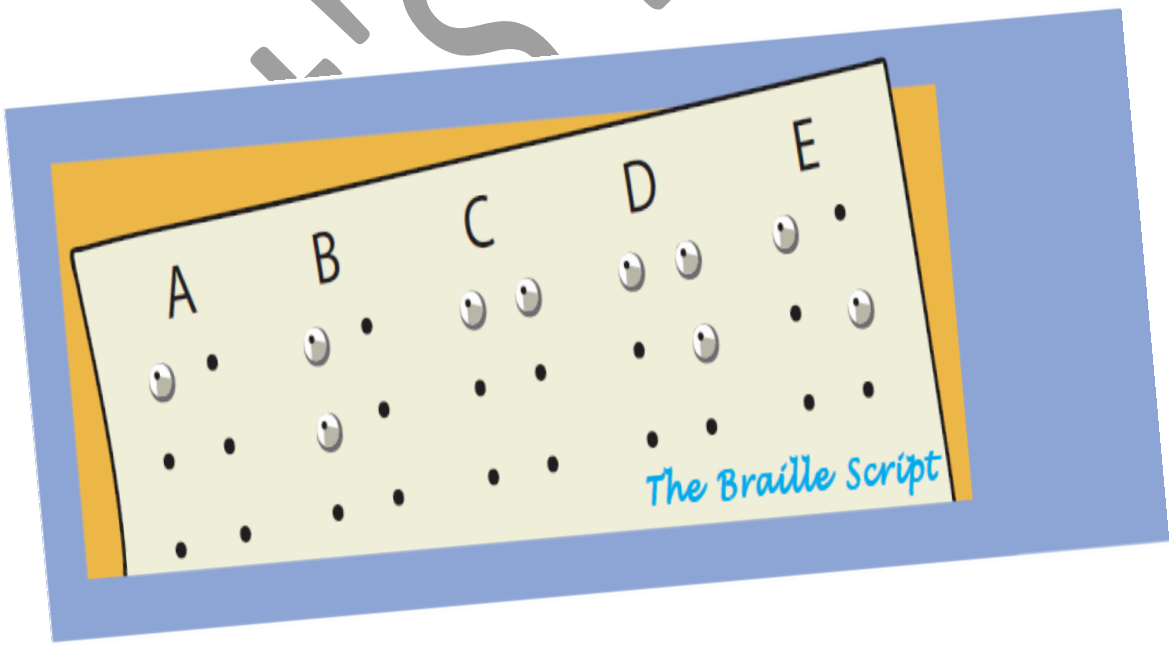
- Dussehra comes before the rainy season
- Farming of sugarcane needs much water.
- Puranpoli(sweet rotis made from jaggery and gram)- This is being eaten with a spicy kadi dish.
- Caravan is a bus or cart in which one can live with all the facilities.

- Rats have poor eye sights but have excellent sense of smell, touch and taste.
- In Nagpur they put sugar in dal.
- In dance the hands and face are used to convey feelings. These are called mudras and bhavs.
- The owl can rotate its neck backwards to a large extent.
- A bird's feathers help it to fly and keep itself warm too. From time to time birds lose their old feathers and new ones grow in their place.

Let's LEARN

• ABOUT BRAILLE…

- Braille is written on a thick paper by making a row of raised points (dots) with a pointed tool. Braille is read by running the fingers on the raised dots.
- Louis Braille belonged to France. when he was three years old, he was playing with his father's tools. Suddenly, a pointed tool hurt his eyes. He lost his eyesight.
- He had keen interest in studies. He kept thinking of different ways to read and write.
- Finally, he found a way – reading by touching and feeling. This way of reading later came to be known as the Braille script.
- This script is based on six points.
- Braille can now also be written using the computer.
- If you show the children the actual Braille script they will be able to understand it better.



LEARN

- In the beginning, pots were made of stone and clay.
- People made pots of stones by digging and scraping stones with their hands.
- *Kahwa(tea)* with almonds and cardamom is being taken in Shrinagar.
- The Dal lake is in Shrinagar.
- Tourists enjoy the ride of shikara in Dal Lake.
- Houseboats can be found in shrinagar.
- Birds prevent fruits from insects as they eat them.
- Bajju village is in Rajasthan.
- Symbols are important to make children understand about maps.
- Discuss the re-use of water.
- This would help the children to understand the importance of saving water.
- It will be useful to listen and adopt suggestions given by the students in this regard.

Let's LEARN

Li chen

I live in Hongkong. My mother and I both love to eat snakes. Whenever we feel like eating snakes, we go to a nearby hotel and eat 'Ling–hu–fen'.

I live in Kashmir. I like fish cooked in mustard oil. Once we had gone to Goa. We ate fish there but it tastes very different. My mother said that it was sea fish cooked in coconut oil. It had to be different.

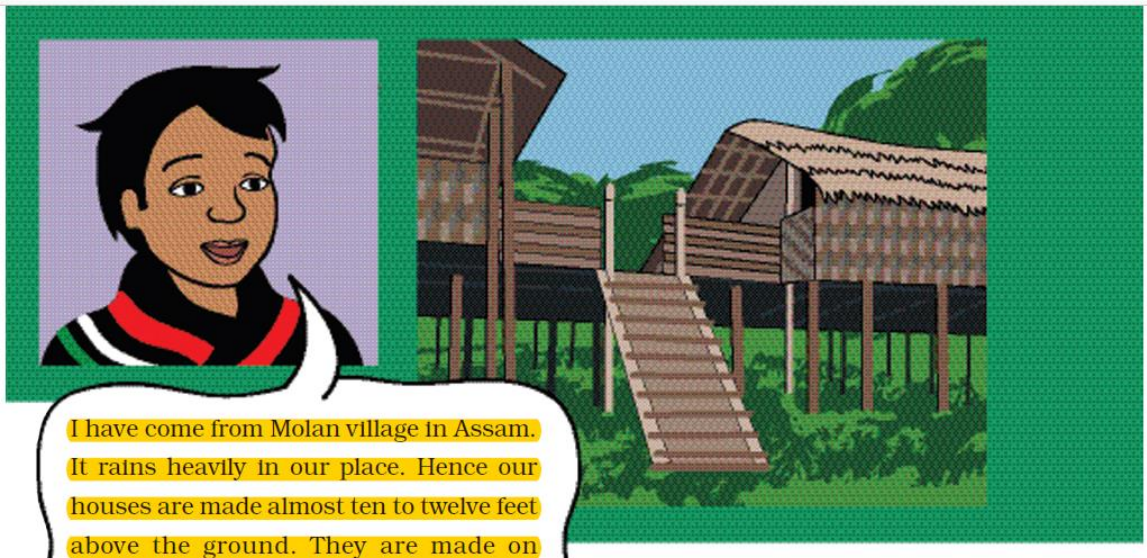
Juni

Thomas

I live in Kerala. I really like to eat two things. Both grow in our courtyard. One grows on a tall tree and the other underground. It is great to eat boiled tapioca with any curry made using coconut. It tastes very good.

Discuss cultural diversity in food by sharing their family experiences and respect them.

- ***<u>Houses of different places…(ASSAM)</u>***



I have come from Molan village in Assam. It rains heavily in our place. Hence our houses are made almost ten to twelve feet above the ground. They are made on strong bamboo pillars. The insides of our houses are also made of wood.

- **To Make a Tank or a Tanka…**

special method – by making **tanks** (*tanka*). Do you know, what a *tanka* is and how it is built?

To build a *tanka*, a pit is dug in the courtyard and it is made *pucca*. The *tanka* is kept covered with a lid. The roof of the house is made sloping so that the rainwater collected here flows through a pipe into the *tanka*. A sieve is attached to the mouth of the pipe so that no dirt goes into the *tanka*. This water is used for drinking after it is cleaned.

Let's LEAR

EVS Pedagogy from NCERT!

- Children can learn the classification skills by categorizing the animals, things, etc.
- Motivate children to collect information from their surroundings as they learn a lot from their surroundings.
- Give children opportunities to observe the nature(not just sit in the class)

  - i.e Active Participation.
- Teacher can connect the classroom to the outside world.
- Encourage them to work in groups- it will help them to learn diversity.
- A teacher can inspire them to read stories.
- Enhance their creativity by promoting activities such as arts and crafts.
- Works can be given e.g draw something and observe yourself.
- Let them be the judge sometimes or give them opportunities to classify plants, animals etc.
- Let them recite the stories or other things do not force them to memorize.
- **Community resources**- A doctor, a farmer, their grandparents can discuss about plants to help them know more (real life examples).
- Encourage children to make friends with a tree- water it, look after it.
- It will develop their concern for the environment.

Let's LEARN

- Teacher should promote student's regional songs, rhymes related to water.
- Make them sensitize towards issues like discrimination.
- Give them opportunities to observe and ask questions.
- To clarify few things discussions can be held.
- Encourage them to use locally available resources or materials.
- Choose situations which children can understand and relate to, so that they can perform better such as games.
- we all have different abilities.
- Relate things to children's own experiences it will make them sensitive towards issues.
- Give them opportunities to express themselves.
- Encourage them towards things such as ***origami, finger painting, arts and crafts etc.***
- Children must know the characteristics of birds even if they do not know their names.
- A teacher can organize a discussion over good or bad effects of rain.
- Children can consult their family members for things like cooking.
- Discussion can be done on how fuel effect our environment, teacher can use news reports on the same.
- A teacher should include children's experiences into conversations.
- Give them real life examples as much as possible.
- A story can be better taught by including role plays-this will enhance their creativity.

Let's LEARN

- Give them opportunities by which they can learn by doing them.
- Let them give opportunities to help each other.
- Discussion on gender issues such as technology, different business related gender issues, alcohol consumption - can be held.
- Let them observe birds closely to know about them- teacher can help them make a bird bath for this.
- Children can share their experiences on local methods of collecting water.
- Things are interdependent in our environment.
- Encourage children to locate some place on map-this will increase their understanding of places, directions and distances.
- Encourage children to ask their elders about animals and insects. Discuss with the children about the reducing number of birds due to changes in the environment.
- Debate helps children look at any issue from different angles- teacher can also explain them the meaning of term debate.
- Teacher can explain different people's role in our society, life etc.
- A railway time table can be brought to classroom. Help the children to learn how to read the time-table. You can use time-table to devise many interesting activities to teach geography, mathematics, etc.
- Through games, a teacher can bring children's attention to the point that we make rules for our lives, the way we do for games, so that things can be done in a proper manner.
- Discussion can be done about discrimination in games on the basis of gender, caste and class.
- Encourage children to observe flowers closely.

Let's LEARN

- The children should be helped to group flowers based on easily observable characteristics- like number of petals, colors, whether in bunches or not, etc.
- A visit can be organized to a construction site nearby so that children can interact with the people working there- people from such places also be invited to the classroom to discuss about their work and tools.
- Changes in the environment, families, places can be discussed in the classroom.
- Events can be organized for children to eat together.
- Let children think about the solutions of issues such as drinking, fights in the families etc. - charts and posters can be prepared by the children with the support of teachers.
- Tables can be used to categorize things such as soluble, insoluble etc.
- Children can be encouraged to learn the languages spoken by their friends. This would help them appreciate and respect other languages.
- Encourage children to talk to their elders and neighbors about old times. This would help them develop their understanding of history.
- Talk to children about various sources of history such as maps, pictures, excavated things, books, records and ledgers.
- Safety rules can be discussed in the classroom.
- Discuss about the possible options for reducing the number of vehicles on the road and also use different news report related to it.
- Encourage the children to relate the use of the term ‘per cent’ to other instances from their lives, such as- chances of winning a game, marks in a subject, discount sales, etc.

Let's LEARN

- Newspaper reports can be used to make students understand the term temperature.
- A discussion can be held on earthquake and its effects.
- News items on issues related to ‘untouchability’ can be used in the class to develop sensitivity.
- Give opportunities to children to share their experiences about games- Discussion can be held on the issues such as similar games for boys and girls.
- Team work can be promoted during games.
- A teacher can show them both aspects of a thing- such as dams-a debate can also be organized.
- Encourage children to use their experiences and imagination about forests.
- A teacher should be sensitive while listening some problems of children.
- An arrangement can be made for the children of families that are always on move- Discussion can be held.

Let's LEARN

• WHAT NCF-2005, SAYS ABOUT EVS?

- Themes of EVS!
- FAMILY AND FRIENDS
- FOOD
- WATER
- SHELTER
- TRAVEL
- THINGS WE MAKE AND DO

Let's LEARN

- Subthemes of EVS!

- FAMILY AND FRIENDS
- 1.1 Relationships
- 1.2 Work and Play
- 1.3 Animals
- 1.4 Plants
- FOOD
- 2.1 Tasting
- 2.2 Digesting
- 2.3 Cooking
- 2.4 Preserving Techniques
- 2.5 Farmers and Hunger
- 3. WATER
- SHELTER
- TRAVEL
- THINGS WE MAKE AND DO

Let's LEARN

• More about syllabus given… (role of the book)

- An attempt has been made by NCERT to develop a deep and inter-related understanding of each theme. Each theme begins with key questions in a language suitable for children.
- One also needed to tackle the differences of gender, class, culture, religion, language, geographical location, etc.
- Evaluation of course should be a continuous process and the child should be assessed as she/he observes, asks, draws, discusses in groups, etc.
- NCF'S RECOMMENDATIONS:
- NCF-2005 recommends that children's life at school must be linked to their life outside the school.
- It will diminish the gap between the school, home and community.
- It discourages the bookish or rote learning.
- Textbook developed on this basis attempt to implement the idea of discourage rote learning.
- It will help us in achieving the child-centered system of education outlined in the NATIONAL POLICY OF EDUCATION(NPE-1986).
- Integrated learning…
- The child looks at the environment around him in a holistic manner and does not compartmentalize any topic into 'science' and 'social science'.

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- Hence EVS in classes III and V integrates the concepts and issues of Science, social science and environment education.
- This subject is not there in classes I and II, but the issues and concepts related to it are meant to be a part of Language and Mathematics.
- There is no place for definitions and mere information in the textbook of EVS even the language used in the book is not formal but that spoken by children.
- Textbook is not the only source of knowledge, but should support children to construct knowledge through all sources such as by people, their environment, newspapers etc.

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• Lesser the burden!

- Flexibility in the daily time-table is required in order to actually devote the days to teaching.
- The methods of teaching and evaluation will also determine the effectivity of the present textbook (in order to make their experience good at school).
- Higher priority and space should be given and opportunities for contemplation, wondering, discussion in small groups and activities requiring hands on experience.
- Textbook of EVS is child centered, so that children get a lot of space to explore and are not compelled to learn by rote.
- Role of school authorities:
- The school principals and teachers will make efforts to encourage children to reflect on their own learning and to pursue imaginative activities and questions.
- Children should generate knowledge by engaging with the information passed to them by their adults.
- Inculcating creativity and initiative is possible if we perceive them as participants in learning, not as receivers of a fixed body of knowledge.
- The prescribed not book should not be considered as the sole basis of examination because this is the reason why the other resources and sites of learning are ignored.

THANK YOU!

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Created by HIMANSHI SINGH (From Let's LEARN YouTube Channel).

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